

1. A system for treating atrial fibrillation, comprising:
an active, energy-delivering electrode being adapted to be placed in contact with a tissue
surface; and
a return electrode selectively movable between a first, retracted position in which the
5 electrode is adapted to be deployed through tissue, and a second, expanded position in which the
electrode is adapted to be placed within a chamber of the heart, the return electrode having a
surface area in the expanded position greater than a surface area of the active electrode.

2. The system of claim 1, further comprising an elongate member mated to the return
electrode, the elongate member and the return electrode being adapted to be deployed through
10 tissue when the return electrode is in the retracted position.

3. The system of claim 1, wherein the active electrode is an electrode array having a
plurality of distinct electrode elements adapted to communicate with a source of ablative energy.

4. The system of claim 3, wherein the surface area of the return electrode is greater than a
surface area of a single distinct electrode element on the active electrode.

15 5. The system of claim 3, wherein the electrode array is malleable.

6. The system of claim 1, wherein the return electrode is formed from a shape-memory
material and is biased to the expanded position.

7. The system of claim 1, further comprising a substantially elongate cylindrical member
having an inner lumen formed therein, at least a portion of the return electrode being slidably
20 disposed within the inner lumen of the cylindrical member.

8. The system of claim 7, wherein the return electrode is substantially disposed within the
cylindrical member in the retracted position, and is adapted to assume the expanded position
upon extension from the cylindrical member.

9. The system of claim 8, further comprising an actuating member mated to the return
25 electrode for moving the return electrode between the retracted and expanded positions.

10. The system of claim 1, wherein the return electrode is a substantially elongate member having a proximal end and a distal end, the distal end being movable between the retracted and expanded positions.

5 11. The system of claim 1, further comprising an actuating member mated to the return electrode for moving the return electrode between the retracted and expanded positions.

12. The system of claim 1, wherein the active electrode is adapted to be placed in contact with an epicardial surface of a heart.

13. The system of claim 1, wherein the active electrode is adapted to be placed in contact with an endocardial surface of a heart.

10 14. A method of forming a lesion at a predetermined heart location, comprising:
providing an energy-delivering electrode;
providing a return electrode selectively adjustable between a first condition and a second, expanded condition, the return electrode having a surface area in the expanded condition greater than a surface area of the energy-delivering electrode;
positioning the return electrode within a chamber of the heart, and expanding the return electrode within the chamber; and
delivering ablative energy through the energy-delivering electrode to the return electrode to form a lesion at the predetermined heart location.

15 15. The method of claim 14, wherein the return electrode is adapted to be deployed through tissue and into the chamber of the heart in the first condition.

20 16. The method of claim 15, wherein the return electrode has a substantially elongate cylindrical shape in the first condition.

17. The method of claim 14, wherein the return electrode has a size in the second, expanded condition that is less than a size of the chamber of the heart.

25 18. The method of claim 17, wherein the return electrode is positioned in contact with heart

tissue in the chamber of the heart.

19. The method of claim 17, wherein the return electrode is free from contact with heart tissue in the chamber of the heart.

20. The method of claim 17, wherein the energy-delivering electrode is positioned on an
5 epicardial surface of the heart.

TOP EDGE FACING UP